

CLAIMS

What is claimed:

1 1. A method for routing network traffic, comprising:
2 receiving the network traffic;
3 determining a destination for the network traffic;
4 obtaining geographic information on one of a source or the destination associated with
5 the network traffic from a map of the network, the map being produced as a result of:
6 determining a route through the network which includes one of the destination
7 or source;
8 deriving a geographic location of any intermediate hosts contained within the
9 route through the network;
10 analyzing the route and the geographic locations of any intermediate hosts;
11 determining the geographic location of the source or destination; and
12 storing the geographic location in the map; and
13 directing the network traffic to a desired destination based on the geographic location
14 of the source or destination.

1 2. The method as set forth in claim 1, wherein receiving the network traffic
2 comprises receiving a domain name service inquiry.

1 3. The method as set forth in claim 1, wherein the network traffic comprises a
2 domain name service inquiry and wherein directing the network traffic comprises resolving
3 the domain service inquiry by selecting the desired destination based on the geographic
4 location from a plurality of destinations.

1 4. The method as set forth in claim 1, wherein receiving the network traffic
2 comprises receiving a request at a host server.

1 5. The method as set forth in claim 1, wherein the network traffic comprises a
2 request, the desired destination comprises a desired server, and wherein directing the network
3 traffic comprises directing the request to the desired server based on the geographic location.

1 6. The method as set forth in claim 1, wherein directing the network traffic to the
2 desired destination comprises selecting a route with a shortest distance to the desired
3 destination.

1 7. The method as set forth in claim 1, wherein directing the network traffic to the
2 desired destination comprises selecting a route to the desired destination having the shortest
3 latency time.

1 8. The method as set forth in claim 1, wherein directing the network traffic to the
2 desired destination comprises selecting a route having the most available bandwidth.

9. The method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on its load.

10. The method as set forth in claim 1, wherein the geographic location comprises the geographic location of the source and directing the network traffic to the desired destination comprises selecting the desired destination because it has content associated with the geographic location.

11. The method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on a connection speed associated with the source.

12. The method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination bandwidth available at the desired destination.

13. The method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on a connection speed associated with the source and bandwidth available at the desired destination.

14. The method as set forth in claim 1, wherein directing the network traffic comprises selecting a route based on interconnection speeds within the network.

1 15. The method as set forth in claim 1, further comprising analyzing the network.

1 16. The method as set forth in claim 15, wherein analyzing comprises analyzing
2 interconnections between nodes in the network.

1 17. The method as set forth in claim 15, wherein analyzing comprises analyzing
2 nodes within the network.

1 18. The method as set forth in claim 15, wherein analyzing comprises modeling
2 behavior of the network.

1 19. The method as set forth in claim 18, wherein modeling comprises
2 approximating the behavior at nodes.

1 20. The method as set forth in claim 18, wherein modeling comprises simplifying
2 the map of the network by combining nodes in traffic routes.

1 21. The method as set forth in claim 1, wherein obtaining the geographic
2 information comprises generating the map of the network.

1 22. The method as set forth in claim 1, wherein obtaining the geographic
2 information comprises querying a system for the geographic information and receiving a

1 response from the system with the geographic information.

1 23. The method as set forth in claim 1, wherein the network comprises the Internet
2 and the network traffic comprises packets.

1 24. A method for routing network traffic, comprising:
2 receiving the network traffic;
3 determining a destination for the network traffic;
4 obtaining intelligence on the network from a map of the network, the map being
5 produced as a result of:
6 determining at least one route through the network which includes the
7 destination;
8 identifying any intermediate hosts contained within the route between a source
9 of the network traffic and the destination;
10 analyzing interconnections between nodes in the network; and
11 storing results of the analyzing in the map; and
12 directing the network traffic to a desired destination based on the intelligence on the
13 network stored in the map.

1 25. The method as set forth in claim 24, wherein the intelligence includes a
2 geographic location of the destination.

1 26. The method as set forth in claim 24, wherein intelligence includes a
2 geographic location of the source.

1 27. The method as set forth in claim 24 wherein intelligence includes a connection
2 speed associated with the source.

1 28 The method as set forth in claim 24 wherein intelligence includes bandwidth
2 available at the destination.

1 29 The method as set forth in claim 24 wherein intelligence includes bandwidth
2 available at the destination and a connection speed associated with the source.

1 30 The method as set forth in claim 24 wherein the intelligence includes a latency
2 time associated with the destination.

1 31. The method as set forth in claim 24, wherein the intelligence includes
2 information on loads at different destinations.

1